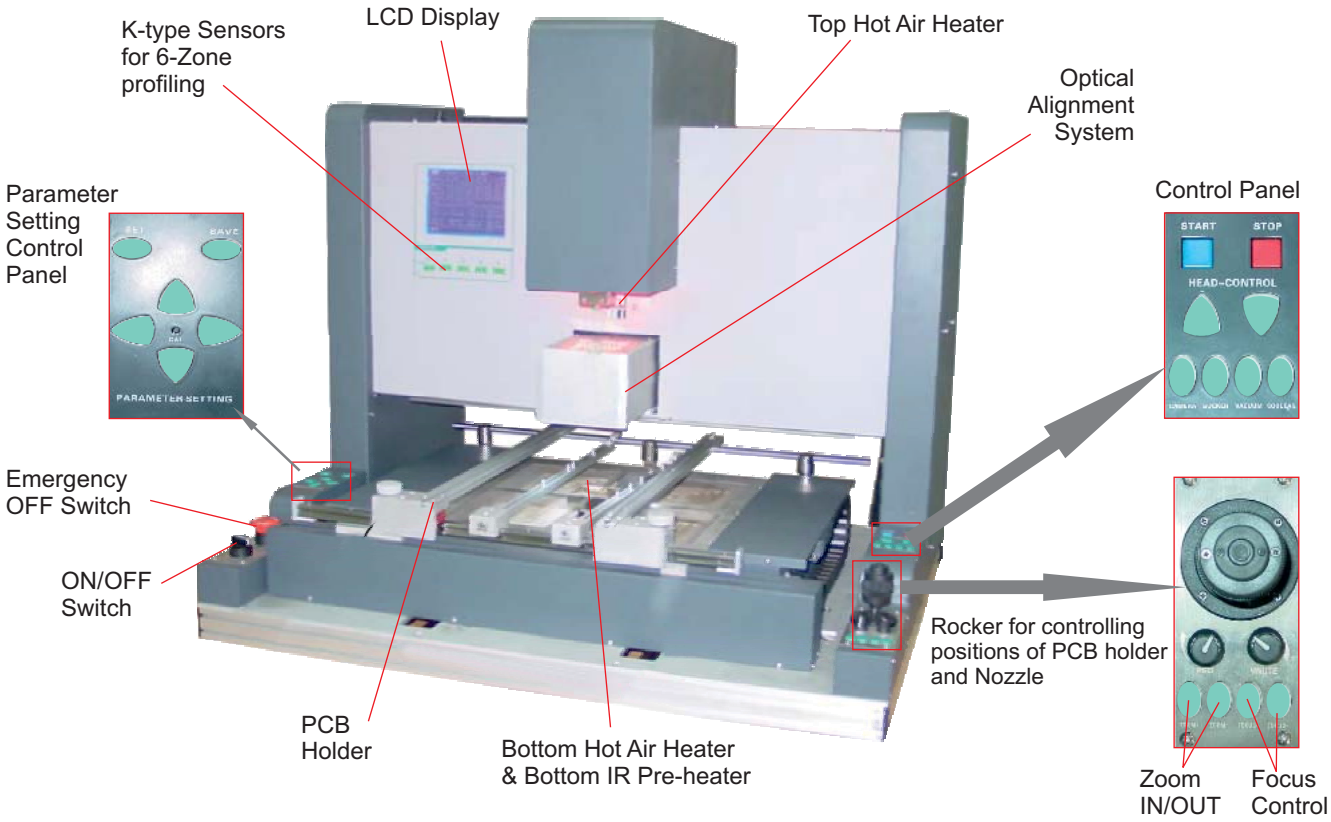
new State-of-the-art latest BGA Rework System Model IBRS-2120A

60x60mm Vision Alignment, 1600 W IR Pre-Heating, 700+700 Watt Hot Airflow



Features

This BGA Rework System has both infra-red preheating at bottom and also hot air preheating at bottom. It ensures even heat distribution under BGA and also provides more accurate temperature profiling.

Wide area 60x60mm Optical Vision System aligns precisely even large size BGAs with clarity. Alignment glass is controlled by motor. Special supporting rods can be fixed with PCB Holder to fix the odd size/shape PCBs. Fine adjustment of X, Y, Z & θ directions are controlled by rocker. Motors are used to control coarse and fine adjustments.

Except fine adjustments of X, Y, θ directions, all other functions are controlled automatically as pick-up, placement and de-soldering of chips, movement of glass and heater, reflow control etc.

Specifications

- Power : 3000 Watt (max.)
- Voltage : 230V AC, 50 Hz
- Top Hot Air Heater : 700 Watt / 500°C (max.)
- Bottom Hot Air Heater : 700 Watt / 500°C (max.)
- Bottom IR Pre-heater : 1600 Watt / 500°C (max.)
- Airflow of cooling fan : ≤ 3.5m^3/min
- Size of the IR Pre-heater : 550x450 mm
- Maximal PCB size : 600x500 mm
- Chip size range : 2x2mm ~60x60 mm
- Placement precision : ±0.025 mm
- Placement force : 1.5 N
- Camera : 12V/300 mA (22x10)
- LED light : White LED (lower side)
  Red LED (upper side)
  with brightness control
- LCD : 100x75 (mm)
  16x2 character
- COM Port : RS-232C
- K-type Sensors : 5

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60x60mm Vision Alignment, 1600 W IR Pre-Heating, 700+700 Watt Hot Airflow

Description of various parts of BGA Rework System Model IBRS-2120A

LCD display: The LCD display is integrated in the systems itself to show the various parameters during the setting and operation.

Sensor: This system has five K-type sensors to check the temperatures of the BGAs & PCB at various places. Users can select the sensors from KT1-KT5 during process.

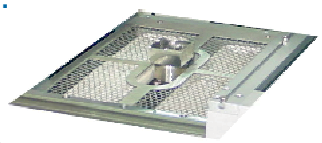
Heating System

Hot Air Top & Bottom Heater:
The main heater includes top hot air heater and bottom hot air heater. The top heater provides 700 Watt heating power with adjustable airflow and temperature. The bottom hot air heater also provides 700 Watt heating power with adjustable airflow and temperature. The air flow and temperature can be adjustable thru software.

Top Hot Air Heater

Bottom Hot Air Heater

Bottom IR Pre-heater:
The bottom IR Pre-heater provides 1600 Watt (4x400 W) heating power with adjustable temperature upto 500°C



Alignment Arm:
The alignment arm is used to align the BGAs. In this arm, there is a camera which displays the image of PCB surface & bottom of BGAs on the PC screen.
The movement of alignment arm is controlled by CAMERA key. User can adjust the light, focus and zoom easily with micro switches.

Optical Alignment

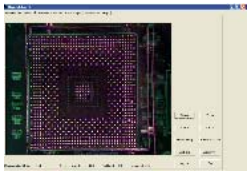


Image on screen

Adjustable PCB Holder with bottom supports

The moveable PCB Holder is capable to fix the various sizes of PCBs. The maximum size it can accommodate is 600x500 mm. The movements of PCB Holder is controlled by ROCKER switch. It can be moved in left, right, backward and forward directions. Special bottom supporting rods can be fixed with PCB Holder to fix the odd size/shape PCBs.

Scope of Supply

- Main BGA System
- Nozzle 55x55mm
- Nozzle 34x34mm
- Nozzle 41x41mm
- Nozzle 40x47mm

Customer has to provide his own Computer.

- K-type sensors (5 pcs)
- Video Cable
- BGA Toolbox
- Operation Manual

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Key Functions of BGA Rework System Model IBRS-2120A

Power Switch and Emergency Switch

Emergency switch is used to cut-off the power supply in any sort of emergency.

Power Switch is used to switch ON or to switch OFF the unit

Parameter Setting

The six keys are used to control the parameters setting of the "MAIN" interface.

- **SET**: to get into the setting mode.
- **SAVE**: to save the parameters and exit from setting mode.
- **CAL**: To calibrate the temperature about KT1~KT5, KTB, KTC and KIR.

: To control the cursor moving from one parameter to the other and then click "SET" key to the parameter setting mode. Press △ or ▽ key to change the parameter and click "SAVE" key to exit the setting.

PCB Positioning Keys

To position the PCB left or right side, press key on the top of the rocker and then swing the rocker to left, right, front or back for the corresponding movement of the PCB. If the key on the top of the rocker is not pressed then the rocker works for pad sucking the chip to rotate it thru 360°

When the aligning arm is out, the Knobs "RED"& "WHITE" and the Keys "ZOOM" & "FOCUS" starts working.

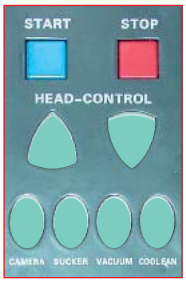
WHITE Knob: to adjust the brightness of the bottom white light.

RED Knob: to adjust the brightness of the top red light.

ZOOM+/ZOOM- Keys: to zoom IN or zoom OUT the image.

FOCUS+/FOCUS- Keys: to adjust the camera focusing.

Control Setting



START: to start the soldering or desoldering process.
STOP: to stop the current process and the heating arm will move up.
HEAD-CONTROL △▽: to control the UP or DOWN movement of the top heating arm
CAMERA: to move the alignment arm out to open the camera for alignment.
SUCKER: to enable the sucking pad
VACUUM: to enable the vacuum bump.
COOL FAN: to enable the cooling fan. When the reflow runs into the "COOL" process, the cooling fan will switch on automatically to cool the PCB.

Hot Air Nozzles for various sizes of BGAs

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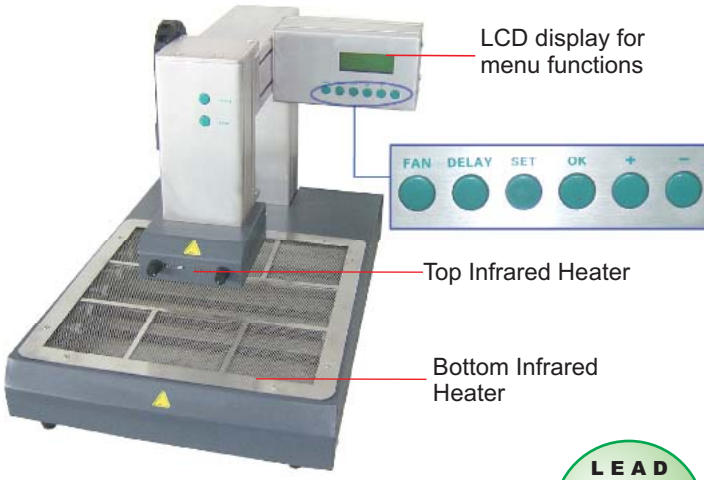
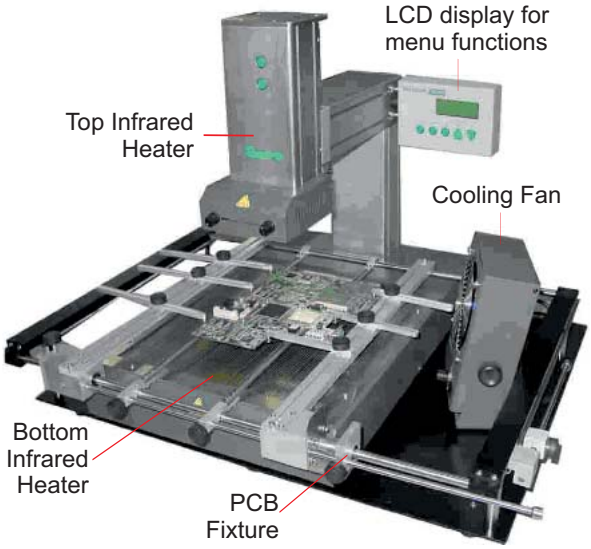
Low Cost Effective BGA Rework System for service industry



Model I760B



Model I760B-DX

LEAD RoHS Compliant FREE

I760B Scope of Supply

- I760B System with top/bottom IR Units
- User Manual
- Software
- RS232 & Power Cable

I760B-DX Scope of Supply

- I760B System with top/bottom IR Units
- PCB Holding and movement Fixture
- User Manual
- Cooling Fan
- Software
- RS232 & Power Cable

Applications

- Repair of laptops, mobiles
- Service Centers
- BGA Rework in Industries & Labs

Unique Features

- Focused Infrared heating delivers heat at the right place. No effect on adjacent components
- IR Pre-Heater 260x260 mm, 1500 W
- Programmable profiles: For precise rework process. (Pre-heating, Soak, Reflow and cooling stages)
- Closed-loop temperature control for precise temperatures
- PC based software: To monitor the process
- Laser Pointer: for positioning component PCB
- PCB Holder: with smooth X-Y movement (for model I760-DX)
- Can rework SMD, BGA, CSP, PGA, Sockets

Specifications

• Power	:	2200 Watt
• Voltage Range	:	230 V, 50Hz
• Top IR Heater	:	720 Watt, 60x60 mm size
• Top Heater Range	:	20 ~ 60 mm
• Bottom Preheater	:	1500 Watt (Infrared type)
• Bottom Preheater	:	260x260 mm
• Heating time of top preheater	:	10 sec (ambient ~ 230°C)
• Communication	:	RS-232 for PC connection
• Infrared temp. sensor	:	0~300°C
• Outside K-type sensor	:	optional
• LCD Display	:	16x2 character, 66x23.5 mm
• Dimensions(LxWxH)	:	330x380x440 mm (approx.)

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